

REMARKS

Claim Status

Independent claims 1, 26 and 31-35 are presented. Claim 1 was previously presented and is now amended. Claims 26 and 31-37 are newly presented. Claims 14, 23 and 24 have been cancelled. Claims 1-13, 15-22, 25, 27-30 and 36-37 are dependent claims. Independent claims 1, 26 and 31-34 are directed to a bracket construction including first and second horizontal wing extensions and an attachable or attached vertical plate. Claims 26 and 35 are directed to the combination of a foam panel with a bracket at least a partially encapsulated vertical plate.

Background

The invention relates to a bracket (typically a corner bracket) which is used for the fabrication of insulated concrete forms or molds. The invention also comprises the combination of a bracket and foam panels that comprise a mold. Figure 11 of the application is an illustration of an insulated concrete form mold of the type contemplated by the present invention. That is, the form or mold includes spaced, foam panels 100 and 101 connected by ties or cross-members such as cross-members 130. The invention is directed to the feature of a bracket such as bracket 120 in Figure 10 which is typically encapsulated in the foam panels and facilitates the formation of the insulated concrete form or mold. The brackets are thus designed to be encapsulated and include generally horizontal first and second wing extensions joined together at a seam and one or more vertical plates attached or attachable to the horizontal wing extensions.

The vertical plates are a desired feature especially at corners of insulated concrete forms (ICF) inasmuch as the plates are typically made from a plastic material and provide a structure to which fasteners may be attached through the foam panel. For example, it may be desirable to fasten

sheeting to the outside surface of an insulated concrete form (ICF) following the pouring of cement into the form. The sheeting material may be decorative or may constitute shingles or the like. It is very beneficial to have some structure especially at the corners of such a form and concrete wall which will accept fasteners to enable fastening of sheeting material to the wall. Thus, the invention provides that the brackets, as taught in the specification and as set forth in the amended claims, provide vertical plates which are designated to be encapsulated in the insulated concrete form (ICF) foam material typically at a corner of the form.

Claim Rejections – 35 U.S.C. §112

With respect to claim 13, as well as related claim 1, the language has been recast to appropriately define the first and second generally horizontally extending wing extensions that are joined together and to define an included angle and too which vertical plate members are attachable or attached. It is noted that in claim 1, the vertical plate members are attachable meaning that they are separate elements which may be attached as a step in the manufacturing operation of the insulated concrete form. However, the vertical plate members may also be integral with the claimed corner brackets and newly submitted independent claim 34 is directed to the concept of having a vertical plate integral or attachable so that in combination the plate may be encapsulated appropriately within an insulated foam material.

Claim 25 has been amended to obviate the rejections raised by the examiner. Various claims have been cancelled and in particular claims 14, 23, and 24 have been cancelled. Claims 26-37 have been added. Claims 31 and 32 are based on original claims 4 and 5.

Typographical corrections have been made to a portion of the specification. In particular, some prior art patent numbers were transposed and have now been corrected.

Claim Rejections – 35 U.S.C. §102; 35 U.S.C. §103

The examiner rejected claims principally on the basis of the Patent Number 4,916,879 entitled “Corner Tie” in the name of Boeshart issued April 17, 1990. The Boeshart ‘879 reference depicts a corner tie wherein insulated foam material such as foam panels 12A and 12B in Figure 1 are assembled, most often in the field, and the assembly is held together by corner ties such as illustrated in the Boeshart ‘879 patent. Figure 2 of Boeshart depicts a typical corner tie which is a integral or unitary molded plastic structure designed to join the previously formed or molded foam panels 12A or 12B in the manner depicted for example, in Figure 1 and Figure 3 of the ‘879 patent.

The corner ties in Boeshart are not designed to be encapsulated within the foam material. Rather they are designed to facilitate joinder and connection and maintenance of the position of separate, precast foam panels (12A, 12B) by a stacking process. Thus, the corner ties include spaced plate members such as plate members 62 and 64 in Figure 2 which fit over the outside faces of the precast insulated foam panels such as 12A and 12B and at the juncture or seam between horizontal layers of the panels 12A and 12B. Not only is the structure of the Boeshart reference distinct, but the purpose and function thereof is distinct from that of the presently claimed invention. Specifically, the Boeshart reference does not disclose first and second horizontal wing extensions which are connected together and extend outwardly from one another to define an included angle to thereby provide for support of an attachable, or attached vertical plate member capable of being encapsulated in a foam panel.

The examiner commented that the concept of having a vertical plate member attachable would be an obvious expedient. First of all, Boeshart does not show or suggest such structure. Secondly, the benefits, advantages and purpose of having an attachable or attached vertical plate

member, as set forth in the claims of the present application, is not taught or suggested by Boeshart. The benefit of a plate member which is attached or attachable and ultimately which can be integrated into the interior of a foam panel is that the vertical plate member may be specifically designed depending upon the size of the form to be constructed. The length, width and other dimensions of the plate member become important factors in the manufacture of the insulated concrete foam form as explained above for purpose of attaching panels or sheeting to the cast structure. Also, the material that can be utilized to comprise the plate member in such a structure may be varied from that of the horizontal wing extensions. Having the vertical plate members being separate and attachable or attached constitutes an improved and distinct feature of the present invention.

Thus, even if integral, the vertical plate members are distinct relative to Boeshart. That is, Boeshart teaches two spaced plates to receive a precast panel and maintain the precast panel there between. Attachment of sheeting to the outside face of such plates would not be an acceptable structure. For example, an air gap would result between the vertically spaced Boeshart devices that could fill with moisture and such an event would be unacceptable as a sound wall construction. Also, Boeshart does not teach the concept of a vertically extending plate adequate to receive fasteners for retention of sheeting or siding or shingles. The plates of Boeshart are limited to locations between horizontal rows of panels with large vertical gaps between them. The Boeshart plates thus do not extend “substantially vertically” from the horizontal plates as claimed in the present application.

With respect to independent claims 26 and 35 which have been newly added, Boeshart does not teach the concept of molding the bracket of the present invention into the interior of the foam insulated concrete foam form (ICF). The combination of the insulated concrete foam material and

the bracket is thus clearly not taught or suggested by the Boeshart reference. In addition, the concept of having horizontal wings and vertical plates as discussed above is not shown in Boeshart or in any of the other references of record. Thus, it is believed that the combination of the claimed corner bracket regardless of whether the vertical plates are affixed, attached or attachable with the foam material is distinct, not found in the prior art and clearly therefore believed to be patentable.

Finally, applicant has included independent claims 31 and 32 directed to the subject matter indicated as being allowable by the examiner. In view of the foregoing therefore, applicant respectfully requested reconsideration of the claims as amended and allowance of the claims is now submitted.

Respectfully submitted,

BANNER & WITCOFF, LTD

Dated: August 11, 2009

By:

A handwritten signature in black ink, appearing to read "Jon O. Nelson", is written over a horizontal line.

Jon O. Nelson
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